

Customer No.: 07278

Docket No.: 06181/0200102-US0

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Kyoung-Ja Woo et al.

Serial No.:

10/678,047

Filed:

October 1, 2003

For:

SHAPE ANISOTROPIC METAL OXIDE NANOPARTICLES AND

SYNTHESIS METHOD THEREOF

January 20, 2004

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

- 1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed: (Check one of the boxes A-D)
 - []A. Within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application.
 - [X] B. before the mailing date of a first office action on the merits, or a first office action after filing a request for continued examination.
 - [] C. after (A) and (B) above, but before the mailing date of a final rejection, a notice of allowance, or any other action that closes prosecution, and Applicants have made the necessary statement in box "i" below or paid the necessary fee in box "ii" below.

(check one of the boxes "i" and "ii" below:)

[] i. Counsel states that, upon information and belief, each item of information listed herein was either (a) cited in a communication from a foreign patent

office in a counterpart foreign application not more than three months prior to the filing of this IDS; or (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

- [] ii. A check for the fee set forth in 1. 17(p), presently believed to be \$180, is enclosed.
- [] D. after (A), (B) and (C) above, but before payment of the issue fee: Counsel states that, upon information and belief, each item of information listed herein was either (i) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the IDS; or (ii) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
 - [] i. A check for the fee set forth in 1.17 (p), presently believed to be \$180, is enclosed.
- 2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form PTO/SB/08) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A, B and/or C and fill in blanks, if appropriate.)

[X] A.	. Pursuant to the Notic	e issued by the United States Patent and Trademark
	Office dated July 11	, 2003 waiving the requirements of 37 C.F.R. §
	1.98(a)(2)(i), a copy.	copies of the United States Patent on PTO/SB08
	is/are not being submi	tted.
[] B.	Document(s)	is (are) deemed substantially cumulative to

B. Document(s) ______ is (are) deemed substantially cumulative to document(s) _____, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.

[] C. Certain documents were previously cited by or submitted to the Office in the following prior applications, which are relied upon under 35 U.S.C. 120:

[SERIAL NO. & FILING DATE].

Applicant Identifies these documents by attaching hereto copies of the forms PTO-892 and PTO/SB08 from the files of the prior application(s) or a fresh PTO/SB/08 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application.

[] 3. Document(s)	are not in the	English	language.	In accordance	with
1.98(c), Applicant states:					

	[]	An English translation of each document (or of the pertinent portions					
		thereof), or a copy of each corresponding English-language patent or application is enclosed.					
	[]	A concise explanation of the relevance of document(s) is found					
		in the attached search report (see MPEP § 609 A(3)x).					
	[]	A concise explanation of the relevance of document(s) is set					
	rı	forth as follows: [Insert concise explanation of relevance]					
	[]	A concise explanation of the relevance of document(s) can be found on page(s) of the specification.					
	[]	A concise explanation of document(s) can be found on the					
	.,	attached sheet.					
[] 4. No	o expla	nation of relevance is necessary for documents in the English language (see					
MPEP § 609 A	A(3)).						
[] 5. Other information being provided for the examiner's consideration follows:							
6. In a	ccorda	nce with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be					
construed as a	a repres	sentation that a search has been made or that information cited is, or is					
considered to	be, ma	terial to patentability as defined in §1.56 (b), or that any cited document					
listed or attach	ned is (or constitutes) prior art. Unless other-wise indicated, the date of publication					
indicated for a	n item	is taken from the face of the item and Applicant reserves the right to prove					
that the date of	f public	ation is in fact different.					
CROSS REFERENCE UNDER 37 C.F.R. §1.78 TO RELATED APPLICATIONS							
Pursua	nt to 37	C.F.R. § 1.78, Applicant notes that the above-identified patent application					
may be related to the following U.S. Patent Applications:							
(1) U.S	S. Paten	t Application Serial No, filed					
Early a	nd favo	orable consideration is earnestly solicited.					

Respectfully submitted,

S. Peter Ludwig
Registration No. 25,351

Attorney for Applicant(s)

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PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act 0/1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449A/B/PTO 10/678,047-Conf. #6651 Application Number INFORMATION DISCLOSURE October 1, 2003 Filing Date STATEMENT BY APPLICANT First Named Inventor Kyoung-Ja Woo Art Unit N/A (Use as many sheets as necessary) **Examiner Name** Not Yet Assigned 06181/0200102-US0 Sheet 1 Attorney Docket Number

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA**	US-6,302,940-B1	10-16-2001	Murray et al.	

	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	۳⁵	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). ** Pursuant to the Notice considered. Include copy of this form with next communication to applicant. "Applicant's unique chatton designation number (optional)." Pursuant to the Notice issued by the United States Patent and Trademark Office dated July 11, 2003 waiving the requirements of 37 C.F.R. § 1.98(a)(2)(i), a copy of the United States Patent on PTO/SB08 is not submitted. See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²		
	CA	Victor F. Puntes, et al., "Colloidal Nanocrystal Shape and Size Control: The Case of Cobalt", Science, Vol. 291, March 16, 2002, pp. 2115-2117.			
	СВ	Sang-Jae Park, et al., "Synthesis and Magnetic Studies of Uniform Iron Nanorods and Nanospheres", J. Am. Chem. Soc., 2000, 122, pp. 8581-8582.			
	СС	Taeghwan Hyeon, et al., "Synthesis of Highly Crystalline and Monodisperse Maghemite Nanocrystallites without a Size-Selection Process", J. Am. Chem. Soc., 2001, 123, pp. 12798-12801.			
	CD	Alexander E. Gash, et al., "Use of Epoxides in the Sol-Gel Synthesis of Porous Iron (III) Oxide Monoliths from Fe(III) Salts", Chem. Mater., 2001, 12, pp. 999-1007.			

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	Considered	

^{&#}x27;Applicant's unique citation designation number (optional). 'Applicant is to place a check mark here if English language Translation is attached.